



# **Lottery Revenue Projections:**

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**Fiscal Year 2005 (2004-2005)**

**Fiscal Year 2006 (2005-2006)**

**Presented to the State Funding Board**

**By Robert Currey, Fiscal Analyst**

**Fiscal Review Committee**

**December 9, 2004**

# Content of Presentation

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- **Revenue Projections for FY2005 & FY2006**
- **Basics of Revenue Generation**
- **Past Performance**
- **Forecasting Limitations**
- **FY2005 Methodology (2004-05)**
- **FY2006 Methodology (2005-06)**



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# **Revenue Projections for FY2005 & FY2006**

# Projections

<b>FY</b>	<b>Estimate Type:</b>	<b>Total Revenue</b>	<b>Net Lottery Proceeds</b>	<b>Sales Per Capita</b>
<b>2005</b>	<b>Estimated Range:</b>	<b>\$684.9m - \$751.7m</b>	<b>\$212.3m - \$233.0m</b>	<b>\$115 - \$126</b>
	<b>Weighted Average Estimate:</b>	<b>\$714.9m</b>	<b>\$221.6m</b>	<b>\$120</b>
<b>2006</b>	<b>Estimated Range:</b>	<b>\$719.5m - \$789.6m</b>	<b>\$223.0m - \$244.8m</b>	<b>\$120 - \$131</b>
	<b>Weighted Average Estimate:</b>	<b>\$750.9m</b>	<b>\$232.8m</b>	<b>\$125</b>



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# **Basics of Revenue Generation**

# Revenue

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- 1) - Instant Games (scratch-off tickets)
  - Approximately 40 different games (began 01/20/04)
- 2) - Online Games
  - Cash 3 - (began 03/01/04)
  - Powerball - (began 04/19/04)
  - Lotto 5 - (began 09/01/04)
- 3) - Miscellaneous Income
  - Retailer application & service fees
  - Interest income

# Expenses

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## 1) Gaming

- Prize payouts
- Retailer commissions
- Vendor fees & advertising

## 2) Operating

- Personnel
- Equipment
- Supplies
- Travel

# Net Lottery Proceeds

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- Net Lottery Proceeds are transferred to the "*Lottery for Education Account*" on a quarterly basis.
- Funds used for Lottery Scholarships and Grants.
- Unclaimed prize money is earmarked for 1) After-school and early-learning programs and 2) Future lottery prize pool.



# In addition...

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- **Tennessee Education Lottery Corporation (TELC) operates on a July through June Fiscal Year.**
- **TELC began selling tickets on January 20, 2004.**



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# Past Performance

# FY2004

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- 6-month period (January – June)
- Total Revenue = \$393.2 million
- Total Expenses = \$269.9 million (68.6%)
- Net Lottery Proceeds = \$123.3 million (31.4%)
- Transferred \$123,271,000 to the "*Lottery for Education Account*".
- Transferred \$2,049,000 to the "*After-School Programs Special Account* " (generated from unclaimed prize money).

# FY2005 Sales (July – October)

Game Type	Revenue Generated	FY05 Wkly Average	FY05 Wkly High	FY05 Wkly Low
Instant Games	\$168,934,938	\$9,653,425	\$9,952,581	\$8,030,368
Cash 3	\$22,310,874	\$1,274,907	\$1,336,572	\$1,216,996
Powerball	\$54,885,261	\$3,136,301	\$6,872,737	\$2,302,901
Lotto 5	\$5,203,633	\$578,181	\$789,234	\$454,374
Miscellaneous	\$1,366,573	\$78,090		
<b>SUB TOTAL</b>	<b>\$252,701,279</b>	<b>\$14,720,904</b>		
<i>Less: Instant Tickets</i>	<b>\$17,245,032</b>	<b>\$985,430</b>		
<b><i>TOTAL NET REVENUE</i></b>	<b>\$235,456,247</b>	<b>\$13,735,474</b>		

# FY2005

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- 4-month period (July through October)
- Total Revenue = \$235.5 million
- Total Expenses = \$164.2 million
- Net Lottery Proceeds = \$71.3 million
- Transferred \$51,300,000 to the "*Lottery for Education Account*".

# Since Inception

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- 10-month period (January thru October)
- Total Revenue = \$628.7 million
- Total Expenses = \$434.1 million (69.0%)
- Net Lottery Proceeds = \$194.6 million (31.0%)
- Transferred \$174,571,000 to the *"Lottery for Education Account"*

# First 12 Month Projections

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- Derived an “average monthly revenue” from last 6 months of actual revenue data.
- Applied average to remaining two months of calendar year (November & December).
- Total revenue estimate: \$744.0 million
- Revenue range: \$736.6m - \$751.4m
- Total Expenses: \$508.3m - \$518.5m (69.0%)
- Net Lottery Proceeds: \$228.3m - \$232.9m (31.0%)
- Per capita sales: \$125 - \$128

# Fiscal Note Estimate

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	Gross Lottery Revenue	Net Lottery Proceeds	Per Capita Sales
2004 Calendar Year (First 12 months of operation)	<b>\$736.6 million - \$751.4 million</b>	<b>\$228.3 million - \$232.9 million</b>	<b>\$125-\$128</b>
Fiscal Memo SB1 - HB1 (Prepared June 2003)	<b>\$670 - \$730 million</b>	<b>\$195 - \$215 million</b>	<b>\$114 - \$124</b>





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# Forecasting Limitations

# Data & Variables


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- **Many variables influence lottery revenues**
  - **Demographic**
  - **Socio-economic**
  - **Retailer participation**
  - **Game dynamics**
  - **Fluctuating jackpots**
- **Limited amount of data (10 months)**

# Other considerations

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- **Natural life cycles of state lotteries appear to have initial periods of growth followed by stagnant (or even declining) revenues.**
- **In some cases, sales decline from implementation.**
- **Revenue growth is highly volatile and inconsistent.**



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# **FY2005 Methodology (2004-05)**

# Objectives

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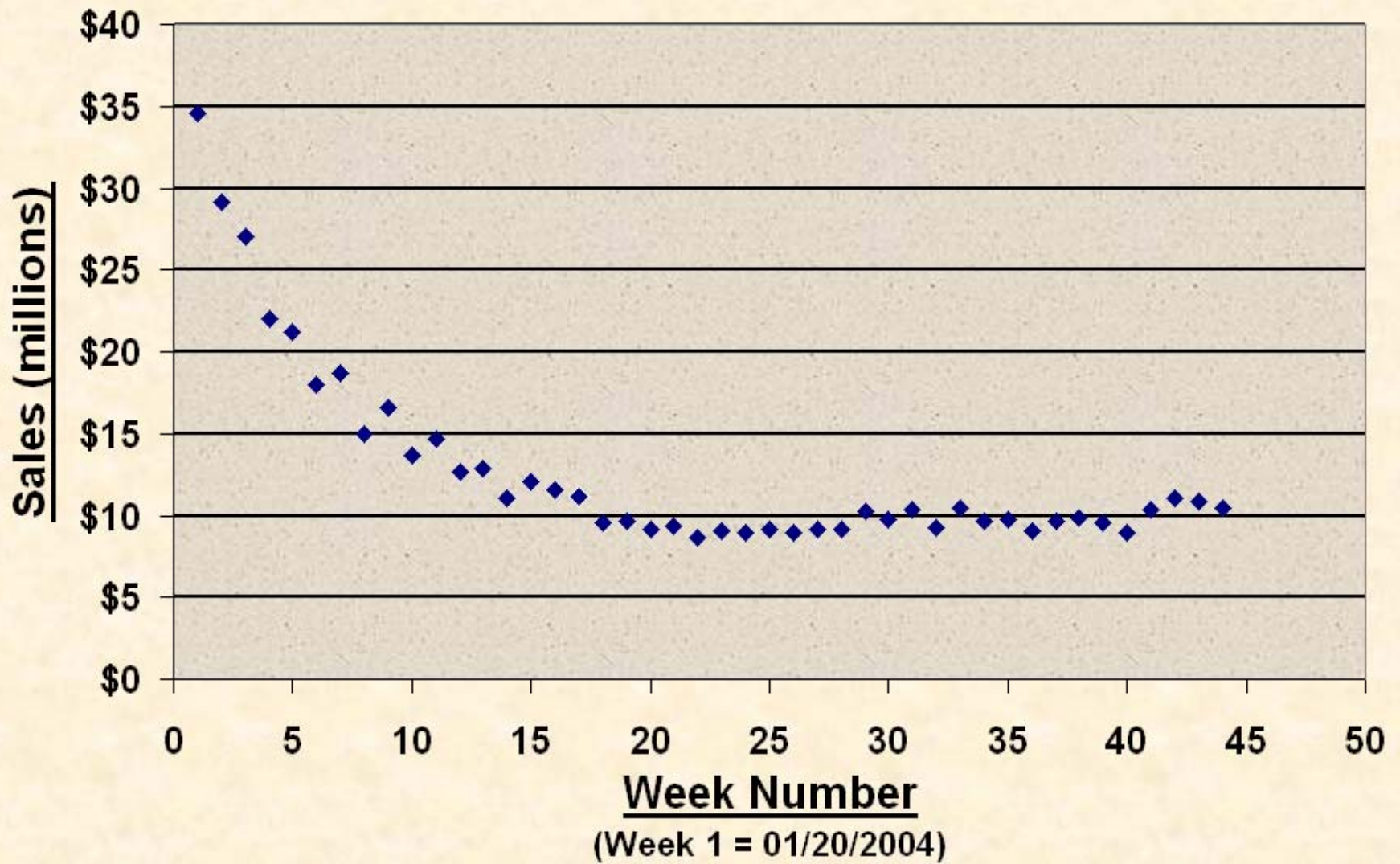
- **Analyze revenue streams by game type.**
- **Develop multiple estimation models for each game type.**
- **Derive a weighted average estimate and an estimate range that are considered to be “statistically-significant” for each game type.**
- **Sum estimates across game types to derive total revenue estimate for FY2005.**
- **Forecast total expenses (as percent of revenue).**
- **Calculate net lottery proceeds & sales per capita.**

# Revenue Estimates by Game Type

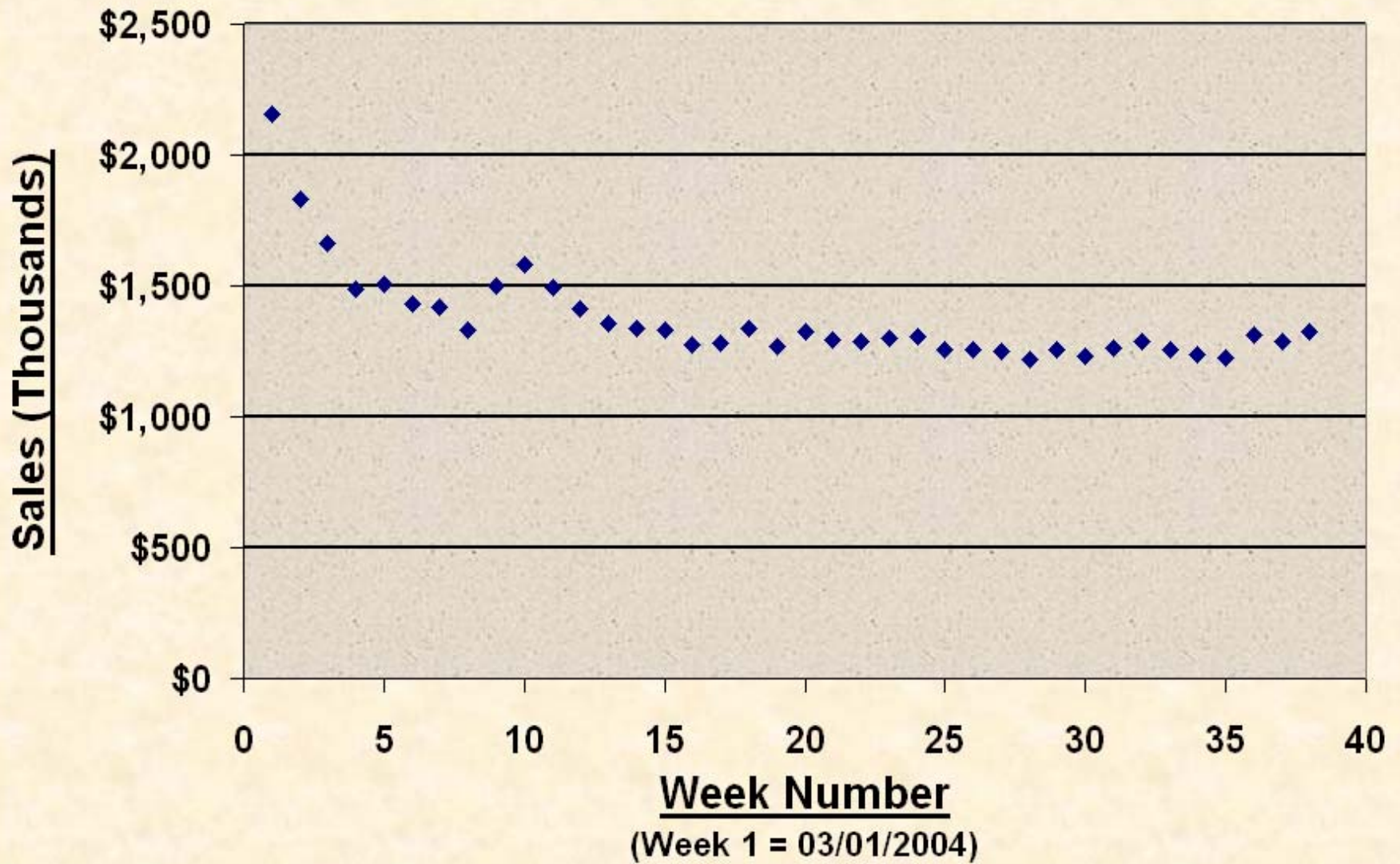
<i>Game Type</i>	<i>Estimate</i>	<i>Estimated Range</i>
<b>1) Instant Games</b>	<b>\$454.8 million</b>	<b>\$444.8m - \$464.2m</b>
<b>2) Cash 3</b>	<b>\$66.8 million</b>	<b>\$66.1m - \$67.4m</b>
<b>3) Powerball</b>	<b>\$164.9 million</b>	<b>\$148.1m - \$189.0m</b>
<b>4) Lotto 5</b>	<b>\$24.4 million</b>	<b>\$21.9m - \$27.1m</b>
<b><i>Sub-Total:</i></b>	<b>\$710.9 million</b>	<b>\$680.9m - \$747.7m</b>
<b>Misc. Income</b>	<b>\$4.0 million</b>	<b>\$4.0 million</b>
<b>FY05 Estimates</b>	<b>\$714.9 million</b>	<b>\$684.9m - \$751.7</b>

Tennessee General Assembly, Fiscal Review Committee

### **INSTANT GAMES (Revenue across time)**

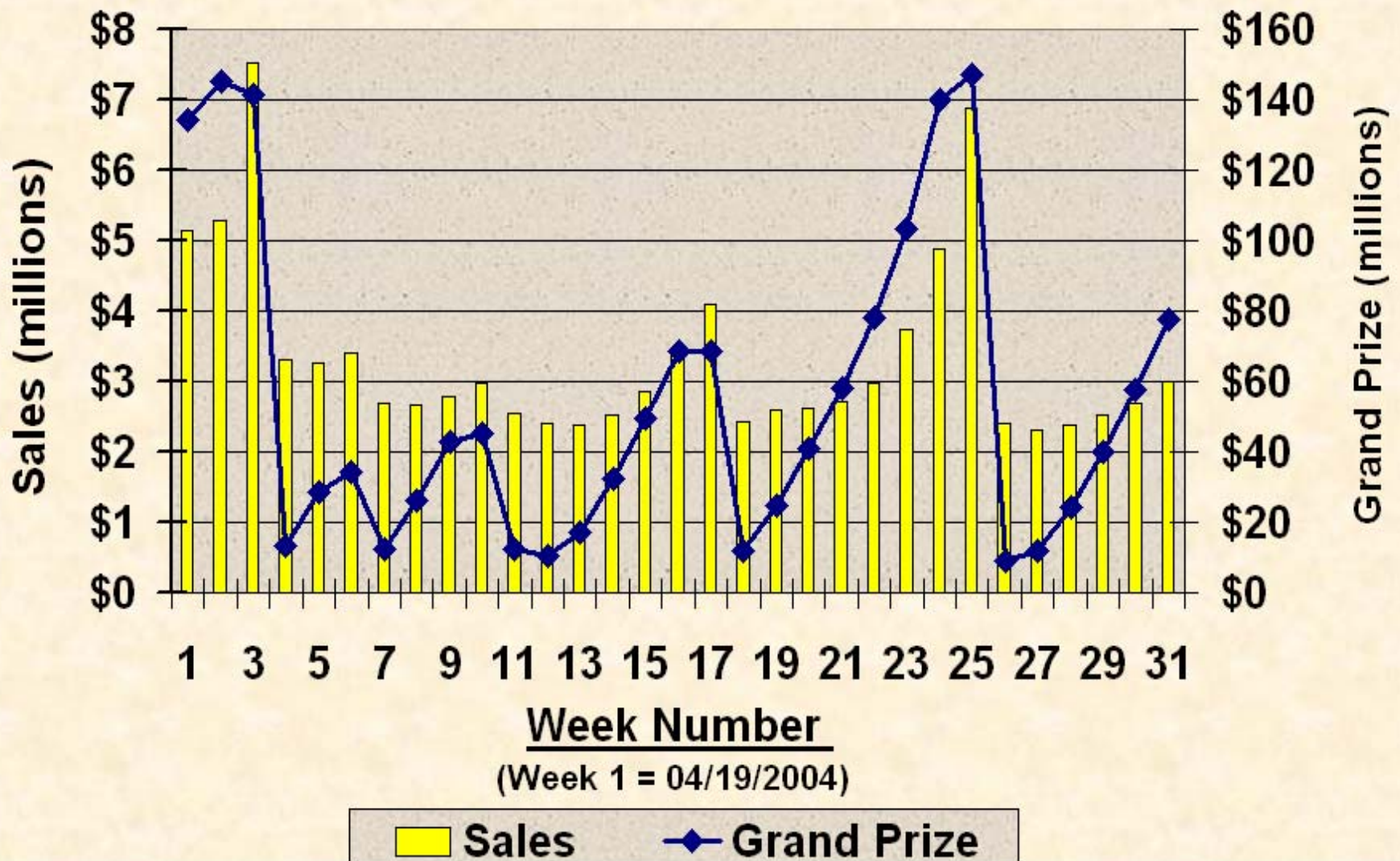


### CASH 3 (Revenue across time)

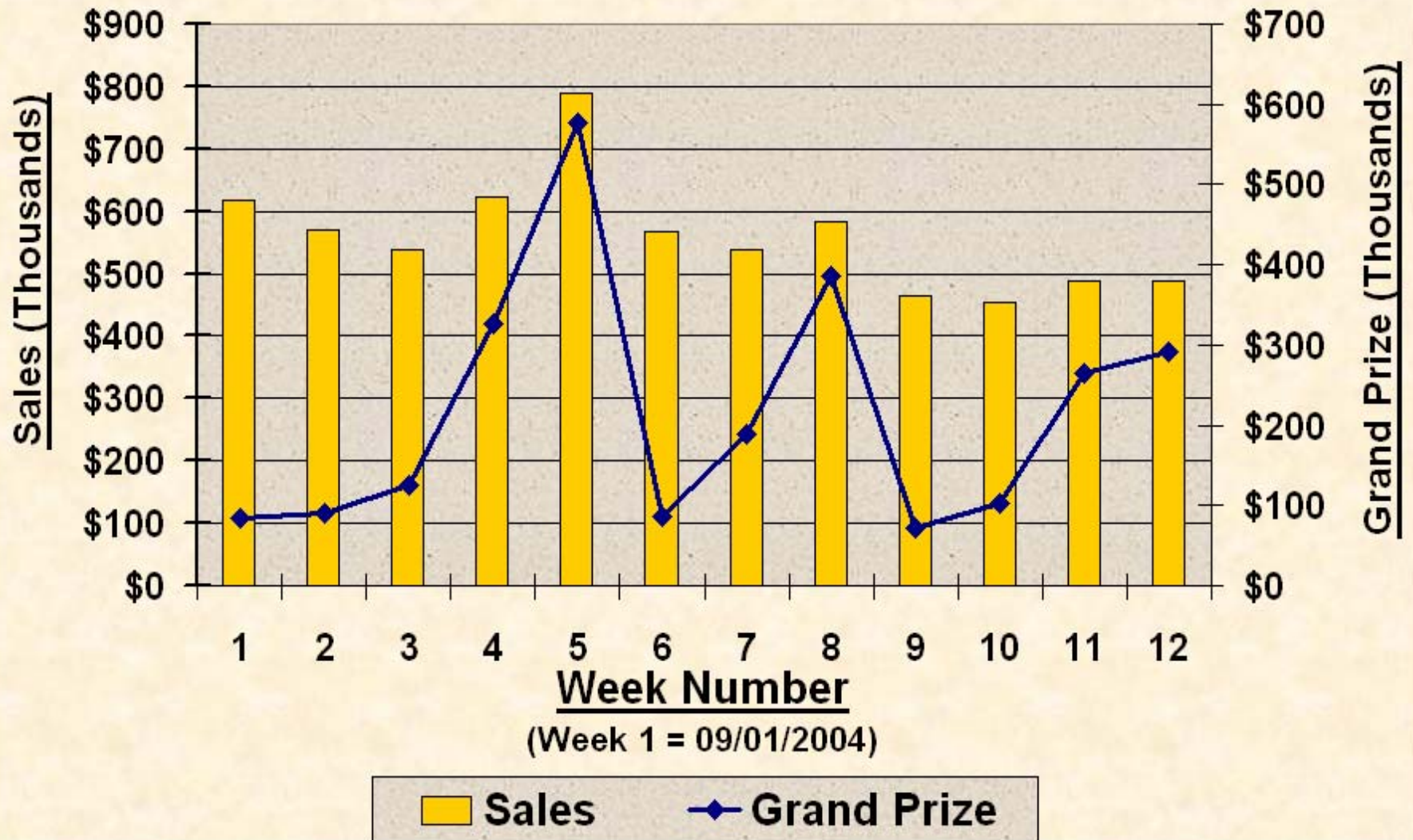




## POWERBALL: Sales-to-Grand Prize

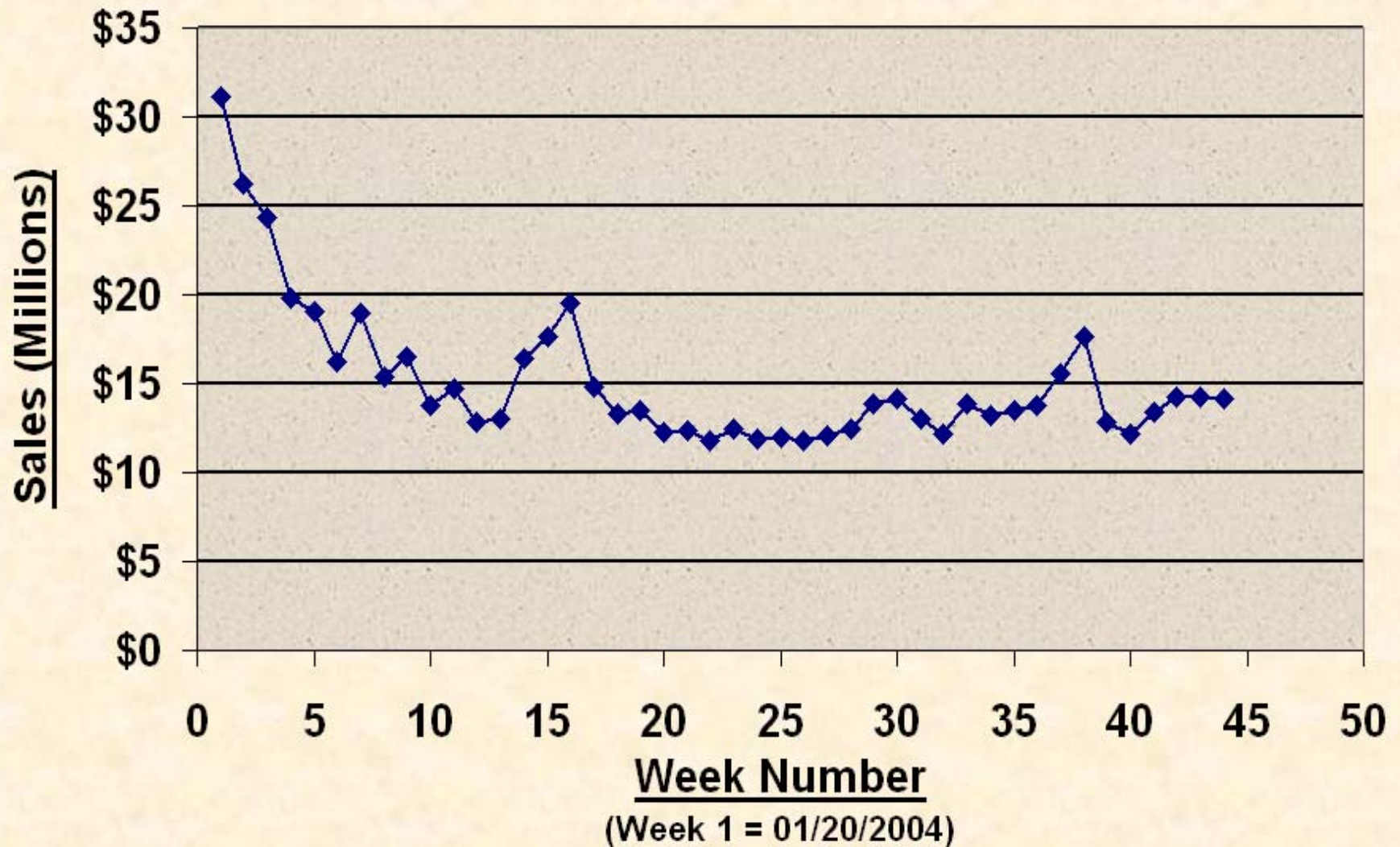


## LOTTO 5: Sales-to-Grand Prize






### NET REVENUE (Across time)



# FY2005 Projections

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<b>Estimate:</b>	<b>Net Revenue</b>	<b>Total Expenses (69%)</b>	<b>Net Lottery Proceeds (31%)</b>	<b>Sales Per Capita</b>
<b>Estimated Range:</b>	<b>\$684.9m - \$751.7m</b>	<b>\$472.6m - \$518.7m</b>	<b>\$212.3m - \$233.0m</b>	<b>\$115 - \$126</b>
<b>Weighted Average Estimate:</b>	<b>\$714.9m</b>	<b>\$493.3m</b>	<b>\$221.6m</b>	<b>\$120</b>



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# **FY2006 Methodology (2005-06)**

# Assumptions

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- 1) Use FY2005 Estimates as base year.
- 2) Sales per capita growth rate = 4.0%.  
*(Consistent with lotteries in KY, GA, FL, MO, OH, and VA over last 7 years {1997 – 2003}).*
- 3) 1-year population growth rate = 1.0%.  
*(Consistent with growth rates since 2000)*
- 4) Expenses (as a percent of revenue) are unchanged.

# FY2006 Projections Recap

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<b>Estimate:</b>	<b>Net Revenue</b>	<b>Total Expenses (69%)</b>	<b>Net Lottery Proceeds (31%)</b>	<b>Sales Per Capita</b>
<b>Estimated Range:</b>	<b>\$719.5m - \$789.6m</b>	<b>\$496.5m - \$544.8m</b>	<b>\$223.0m - \$244.8m</b>	<b>\$120 - \$131</b>
<b>Weighted Average Estimate:</b>	<b>\$750.9m</b>	<b>\$518.1m</b>	<b>\$232.8m</b>	<b>\$125</b>



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# PROJECTIONS SUMMARY



# Summary of Revenue Projections

<b>FY</b>	<b>Estimate Type:</b>	<b>Total Revenue</b>	<b>Net Lottery Proceeds</b>	<b>Sales Per Capita</b>
<b>2005</b>	<b>Estimated Range:</b>	<b>\$684.9m - \$751.7m</b>	<b>\$212.3m - \$233.0m</b>	<b>\$115 - \$126</b>
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	<b>Weighted Average Estimate:</b>	<b>\$750.9m</b>	<b>\$232.8m</b>	<b>\$125</b>



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# QUESTIONS?